WASHINGTON MILITARY DEPARTMENT POLICY

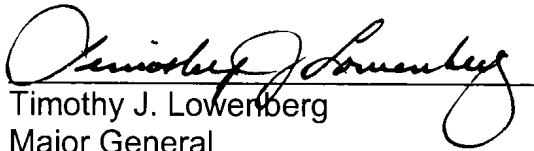**Administrative Policy Number 21-00**   **INFORMATION TECHNOLOGY PLANNING/LIFE-CYCLE REPLACEMENT**

1. PURPOSE: The Washington Military Department, hereafter referred to as WMD, must continually reassess strategies for managing and financing information technology. This policy establishes practices and guidance to be followed in the decision making process to replace, upgrade or repair Information Technology of the department.

2. APPLICABILITY: This policy applies to all state funded information technology assets within the WMD to include those state assets managed by the Military Department state civilian employees (MD), the Washington Army National Guard (WAARNG), the Washington Air National Guard (WA ANG), and the Emergency Management Division (EMD), collectively referred to in this plan as Divisions of the Military Department.

3. REFERENCES:

    a. RCW 43.105.170, 172, 180, and 190 Information Technology Portfolios.
    b. This policy does not supersede Washington Army National Guard (WAARNG), Washington Air National Guard (WA ANG) or other Federal agency directives or regulations for the management of federally provided information technology assets.
    c. This policy supercedes any Military Department policies or guidance not listed in item b above, that have the same or similar name or topic dated prior to the effective date of this policy.

4. POLICY: The Information Technology Replacement Procedures and Guidelines are attached for each Division's compliance. This policy will be adhered to in all aspects of information technology planning, management, and budgeting. All employees involved in information technology shall comply with this policy. It is the responsibility of each Division Director to ensure division compliance.

    An annual report of the inventory of all information technology assets will be provided by all Divisions, through the Information Technology Review Board, to the Department. The ITRB will use those inventory reports to recommend budgets and the actual maintenance, upgrade or replacement of state funded information technology equipment.

    APPENDIX A: The Information Technology Replacement Plan is hereby incorporated as part of this policy.

Appendix B: Life-cycle standards for state funded information technology assets are hereby incorporated as part of this policy.

Timothy J. Lowenberg
Major General
The Adjutant General
Director, Washington Military Department

8 August 2002
Date

APPENDIX A
INFORMATION TECHNOLOGY REPLACEMENT PLAN

1. Plan Guidance:

   a. Separate plans will be developed for federally funded assets of each Division based upon the requirements of those funding sources.
   b. All efforts will be made to ensure that the information technology plans and expenditures from all funding sources are coordinated with the information technology goals and objectives of the WMD.
   c. This plan is to be used as a basis for collaboration among the WMD's managerial, financial, and technical leaders. This plan emphasizes a shift to life-cycle budgeting; an emphasis on technology replacement; plans to recycle old technology; and recognition of the significant financial challenges of information technology.

   The rate of technological advancements is accelerating; standards and architectures are changing daily. Unit prices of systems are falling but the WMD's overall investment in information technology is continually increasing. Developing rational and viable financial strategies to accommodate this rate of technological change and increasing cost is imperative to coordinating the management of the WMD's information technology assets.

   To assist in accomplishing this goal, the WMD has established an Information Technology Review Board (ITRB) that is tasked with recommending strategies, standards, and architectures to assist management in dealing with these challenges. The WMD Director appoints the members of this Board.

2. Information Technology Management Principles to be Followed:

   a. <u>Economic planning</u> for information technology in the WMD must consider the following:
      (1) The overall value of the WMD's information technology investment is continually increasing.
      (2) The demand for technology is growing.
      (3) The acquisition price per unit of computer power is declining.
      (4) The total cost of maintaining technology is increasing.

    (5) The rate of change in technology actually shortens the economic life cycle of many technologies.

b. <u>Life-cycle</u> is defined as the useful economic life of an item, after which the asset is:

    (1) No longer suited for its intended purpose,

    (2) The maintenance and support have grown to the extent that it may no longer be cost effective to retain the computer, or

    (3) New requirements or performance standards have necessitated its replacement to meet user needs.

c. <u>Life-cycle standards</u> are contained in Appendix B to this policy. The life-cycle standards will be periodically reviewed and used as the basis for state budget requests. The actual replacement, upgrade, or repair of technology assets will then be based upon approved budgets, management direction and life-cycle standards. Federal funding sources will determine life-cycle standards for federally funded assets and those requiring state matching funds.

d. <u>Asset management</u>: The management of technology assets will be primarily guided by the operational needs of each position in the WMD. This will require a complete inventory of all information technology assets in the WMD and a determination of the information technology requirements of each position. Assets will be assigned to a position based upon the requirements of each position. Information technology assets will remain with the position and will not normally be transferred with an individual assuming a new position. Division management must approve exceptions to this policy.

e. <u>Reporting procedures</u> will be developed to automate the inventory of information technology assets to minimize the duplication of efforts. Each Division will update their portion of the inventory, as assets are added, deleted, or upgraded. Every effort will be made to ensure that the maximum useful life of all information technology assets is attained. The cost of replacing an asset with a superior replacement should be compared with the cost of upgrading the existing asset to determine the best benefit. A cost/benefit approach will be used in each case. In the case of replacement, the existing asset will be moved, wherever possible, to a position where its capabilities will satisfy the functional requirements of that position. Each Division will identify those information technology assets that are available for redistribution in their inventory reporting. An availability list of assets will be routinely published to maximize the useful life of information technology assets.

f. <u>Financial Implications</u>: The WMD can expect a continual improvement in the return on investments it makes in information technology. To do this will require an increased percentage of each Division's budget resources for information technology assets. The WMD will make every effort to invest, where the return is greatest. This does not imply that technology budgets will expand to 100 percent of the WMD's budget. It does, however, mean that all levels of management need to recognize that technology budgets should be expected to grow steadily over a relatively long period of time.

Financial planning must be an integral part of the WMD's strategic agenda that links planning priorities, assessment, and resource allocation. Technology investment decisions should be viewed as a cost/benefit issue, where the investment is made to support the goals of the WMD. The WMD's changing needs should be of primary concern and used as an opportunity for advancing and empowering change.

g. Changing Technology: The real challenge of planning for and financing information technology is in dealing with the rate of change. Rapid architectural and technical changes make this planning extremely difficult, but not impossible. Adapting strategies to the rate of change inherent in information technology systems will be a challenge and will continue to accelerate in the future. Financial strategies will need to support the technological evolution of the WMD's systems to optimize investments over time. Long amortization periods or end-of-year purchasing decisions need to be minimized and replaced with a commitment to annually financing the functional needs of each position.

h. Department Technology Infrastructure: The WMD will develop policies to define the technology standards, architectures, and mechanisms necessary to support the diverse and changing needs of all Divisions. Those policies will be developed with the goal of finding synergies between the technologies and financial strategies of each Division as well as supporting the strategic and organizational goals of the WMD with technology.

i. Life-cycle Budgeting: There is a continuing need to understand IT life cycles and to budget accordingly. Life-cycle budgeting will be used to promote coordination between the separate entities of the WMD. This will shift the emphasis away from the acquisition of technology and focus financial decision on its replacement.

Life-cycle planning will be used to:
(1) Avoid unplanned expenditures.
(2) Plan for the increased financial demands of future information systems.
(3) Establish realistic life-cycle projections.
(4) Coordinate the investments made in technology on a WMD wide basis.

Life-cycle budgeting is an opportunity to convert one-time funding decisions into an annual expense. The basic life-cycle equation (number of units x price/unit divided by life-cycle years = annual cost) converts the expense into a reasonably stable long-term budget. There will be many technical decisions that will vary, what to buy, what standards, what architectures, what operating systems, and so forth, but life-cycle budgeting will aid in developing stable budgets. Life-cycle budgeting should be a major consideration in order to implement ongoing funding of WMD systems.

The life-cycle budget process amortizes all equipment of a resource over its pre-determined projected useful economic life.

Life-cycle cost factors should include:
(1) Network infrastructure
(2) Network hardware
(3) Desktop hardware
(4) Printers and other peripherals
(5) Software maintenance
(6) Technical support
(7) Consultants and technical customization
(8) Systems engineering

Life-cycle budgeting provides a base from which the WMD can determine what it should reasonably expect to spend on average each year to support technology.

The Department life-cycle standards about quantity, price, and life cycle costs will require continual review and updates. Projected annual budget requests will be updated as standards, architecture, and inventories change. The emphasis needs to be on the continuing cost over time, not the cost of any particular year.

j. Recycle Technology: Developing strategies to manage technology life cycles is a fundamental requirement of this plan. Technology rarely wears out, but it does become obsolete. The result is a clear need to manage technology life cycles by focusing on replacement strategies and recycling within the WMD. Strategies in recycling technology must consider:
(1) The cost of re-deploying the technology
(2) Equity between Divisions
(3) Diverse network standards
(4) WMD support availability

k. Leasing: The decision to purchase or lease technology must be made in conjunction with long-term planning. Leasing has several advantages:
(1) Commits the WMD to replacement on a regular life-cycle basis.
(2) Recycling becomes the responsibility of the vendor.
(3) Opportunity to recapture the salvage value of leased assets at the end of the lease period.
(4) Allow vendors to participate in developing the WMD's future technology architectures.

The Department of Information Services (DIS) leases computer systems to State agencies. This is normally done using a three-year lease. All WMD decisions to purchase or lease Information Technology assets will include an analysis of the projected costs of both approaches. The Information Technology Review Board (ITRB) is tasked with providing recommendations to all Divisions, as to whether to purchase or lease the asset. The final decision to purchase or lease remains with Division management.

| Administrative Policy Number 21-00 | INFORMATION TECHNOLOGY PLANNING/LIFE-CYCLE REPLACEMENT Procedures and Guidance |

APPENDIX B
INFORMATION TECHNOLOGY LIFE-CYCLE REPLACEMENT STANDARDS

1. Applicability and Use of Standards:

   a. The Life-cycle standards will be used for planning and budgeting for the replacement, upgrade and or repair of all state funded information technology assets within the WMD.
   b. Application of these standards in conjunction with the planning guidance and methodologies in Appendix A is required of WMD Divisions that have state funded Information Technology assets.
   c. The equipment listing of approved life-cycles will be updated by the Information Technology Review Board as required.
   d. Average equipment costs are provided only for budget estimation purposes. The actual unit replacement cost may vary.

2. Approved WMD Information Technology Equipment Life-Cycles for Replacement, Upgrades and Repairs:

Item	Avg Life Cycle-Months	Average % Yearly Replacement	Average Unit Replacement Cost	Estimated % Annual Repairs or Upgrades
DICTAPHONE	84	0%		2%
LAHAR SYSTEM	120	0%		0%
SEISMOLOGY SYSTEMS	120	0%		2%
PA SYSTEM, EOC	120	0%		4%
CELLPHONES	48	10%		0%
ACCESS	36	0%		10%
WORKSTATIONS	36	33%	2,500.00	5%
LAPTOPS	24	50%	3,000.00	5%
CSU/DSU	60	0%	4,000.00	2%
LAN, HUBS	36	0%		2%
LAN, SWITCH	48	0%	2,000.00	2%
FIREWALLS	48	0%	9,000.00	2%
PLOTTERS	48	0%		5%
PRINTERS	36	33%	2,000.00	0%
ROUTERS	48	0%		2%
SCANNERS	36	33%		0%

SERVERS	48	25%	15,000.00	20%
SOFTWARE, APPLICATIONS	36	33%	250.00	5%
SOFTWARE, SERVER	36	33%	600.00	5%
SOFTWARE, OPERATING SYSTEMS	36	33%	250.00	5%
FAX	48	10%		0%
WEB SITE	36	0%		0%
LICENSES, FCC	60	0%		10%
LICENSES, SOFTWARE	12	100%		10%
MICROWAVE EQUIPMENT	120	0%		5%
CHANNEL BANKS	120	10%		5%
PAGETHRU	120	0%		5%
PAGERS	36	10%		10%
POWER SUPPLIES	24	10%		2%
UPS	48	10%		2%
HF	120	5%		5%
800 MHZ	120	5%		5%
UHF	120	5%		5%
VHF	120	5%		5%
LOW-BAND	120	5%		5%
REPEATERS	120	10%		5%
CONSOLES, ZETRON	120	5%		5%
FNARS	120	5%		5%
NWS TRANSMITTERS	120	5%		5%
NOAA WEATHER RECEIVERS	120	5%		5%
RACES SYSTEMS	120	5%		5%
SATELLITE PHONES	120	10%		5%
TRAILER, SATELLITE	120	10%		5%
PBX	120	0%		5%
CONSOLES	120	0%		5%
TELEPHONES	60	,10%		5%
STUIII	0	0%		5%
VOICE MAIL	120	0%		5%
EAS CONTROLLERS	120	5%		5%
SIRENS	120	0%		5%
TONE ALERT RADIOS	120	5%		5%
VARIABLE MESSAGE SIGNS	120	0%		5%